

REMARKS

Claims 1, 3, 6, 9-13, 15, 18, and 21-33, are pending in this application. Applicants have made several amendments to the claims in this Response. Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, claims 10, 27, and 31 have been rewritten to correct minor grammatical issues with the claims. In addition, claims 1, 13, and 22 have been rewritten to overcome the 35 U.S.C. § 112 rejections.

As no new matter has been added by the amendments herein, Applicants respectfully request entry of these amendments at this time.

THE REJECTIONS UNDER 35 U.S.C. § 112

Claims 1, 3, 6, 9-12, 13, 15, 18, 21-33 were rejected under 35 U.S.C. § 112, first paragraph, as not enabled for the reasons set forth on pages 3-4 of the Office Action. In addition, the Examiner rejected claims 1, 3, 6, 9-12, 13, 15, 18, and 21-33 under § 112, second paragraph, as indefinite as explained on pages 4-5 of the Office Action.

Claims 1, 13, and 22 have been rewritten to address the language of concern to the Examiner. As discussed below, however, Applicants respectfully disagree with the Examiner's reasons for the remaining rejections.

The Term "Normally Accepted" Is Enabled and Adequately Described

As known to those of ordinary skill in the art, alloys generally contain small amounts of impurities. As such, skilled artisans are well aware of the levels of impurities that are "normally accepted" in alloys such as the one presently recited. In addition, the Written Description itself refers to European Patent No. 0 674 800 as an exemplar of a publication discussing the normally acceptable impurities levels, which are suitable in the presently recited alloy of the invention. See, e.g., Page 7, lines 27-29.

And, even assuming *arguendo* that one of ordinary skill in the art is not aware of the normally accepted levels of impurities for alloys, one would be aware that he or she should consult a standard that defines acceptable impurity levels in alloys. For example, ASTM

standard B 349-93, a copy of which is included for the Examiner's reference, outlines the standard for impurity levels for zirconium sponge.¹

Accordingly, Applicants respectfully submit that the term "normally accepted" is enabled and that one of ordinary skill in the art, after reading the Specification, would be aware of how to make and how to use the invention, as presently recited.

"Second Degree of Recrystallization Is 100%" Is Enabled and Adequately Described

Applicants respectfully submit that the phrase "wherein the second degree of recrystallization is 100%" is adequately described and enabled. In fact, those of ordinary skill in the art are aware of methods of investigation to determine whether a complete or partial recrystallization has occurred. For example, optical metallography, discussed in greater detail in previously cited document U.S. Patent No. 4,993,136 to Foster ("Foster") at Col. 7, lines 15-16, may be used to determine the degree of recrystallization. In addition, transmission electron microscopy, which enables one to observe individual grains of a material and ascertain the percentage of grains that are substantially free from dislocations, may also be used to determine the degree of recrystallization. In particular, if 80 percent of the grains are substantially free of dislocations, then the degree of recrystallization is 80 percent. Likewise, if all the grains are substantially free of dislocations, then the recrystallization is complete. The statistical accuracy of such an analysis depends on the number of specimens, however, a skilled artisan would be well aware of the steps to perform such an analysis.

Furthermore, those of ordinary skill in the art are well aware of the terms "complete recrystallization" or "fully recrystallized" and, thus, would not find the phrase "wherein the second degree of recrystallization is 100%" not adequately described nor enabled. For example, Foster describes such degrees of recrystallization. See Col. 6, lines 66-67.

For at least these reasons, Applicants respectfully submit that the presently recited degree of recrystallization is enabled and adequately described.

¹ Although the requirements could differ slightly between various standards bodies, the ASTM standard is the normally accepted standards body. Moreover, Applicants respectfully submit that, to comply with 35 U.S.C. 112, first paragraph, it is not necessary to "enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect." *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1338 (Fed. Cir. 2003) (an invention directed to a general system to improve the cleaning process for semiconductor wafers was enabled by a disclosure showing improvements in the overall system).

In sum, Applicants respectfully submit that the rejections under § 112, first and second paragraphs, are overcome either by amendment or argument. As such, reconsideration and withdrawal of the § 112 rejections are respectfully requested.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

No fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Hanify & King, P.C., Deposit Account No. 50-4545, Order No. 19378.0089.

Respectfully submitted,

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